

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) A method of performing service diagnostics on appliances, the method comprising:

~~receiving a first level authorization to access at least one appliance from a diagnostic interface;~~

~~accessing the at least one appliance via a diagnostic interface;~~

~~receiving, from a first appliance of a plurality of appliances, a request to perform a service diagnosis of [[the]] at least one appliance of the plurality of appliances through the diagnostic interface, wherein each of the plurality of appliances are communicatively coupled through a communication bus;~~

~~determining if the request to perform the service diagnosis requires access to at least one superuser-level function;~~

~~requesting a second level of authorization to access the at least one superuser-level function if it is determined that the request to perform the service diagnosis requires access to the at least one superuser-level function;~~

~~determining whether the first appliance has obtained control of the communication bus;~~

~~if it is determined that the first appliance has obtained control of the communication bus,~~
performing a service diagnosis of the at least one appliance ~~through the diagnostic interface~~

using commands specific to the at least one appliance; ~~the commands specific to the at least one appliance that are~~ obtained from a device information table;

~~implementing the diagnostic interface within a single device including a display, processing circuitry programmed with diagnostic software such that only second level authorization access is permitted to the at least one superuser level function and generating service commands to perform the service diagnosis; and~~

~~servicing, by the diagnostic interface,~~ the at least one appliance, said servicing comprising at least one of adjusting a characteristic of the at least one appliance and displaying to a technician the service diagnosis.

2. (canceled)

3. (canceled)

4. (previously presented) The method of claim 1 wherein the service functions comprise safety functions, parameter functions, and appliance status functions.

5. (canceled)

6. (canceled)

7. (original) The method of claim 1 further comprising connecting to a remote system to retrieve service diagnostic information.

8. (currently amended) The method of claim 1 wherein performing service diagnosis includes diagnosing and servicing the at least one appliance based on [[the]] a diagnosis of the at least one appliance diagnosis.

9. (previously presented) The method of claim 8 wherein servicing the at least one appliance comprises patching appliance firmware.

10. (previously presented) The method of claim 8 wherein servicing the at least one appliance comprises adjusting appliance parameters.

11. (previously presented) The method of claim 1 further comprising maintaining an external database of appliance information based on diagnosis of the at least one appliance.

12-21. (canceled)

22. (currently amended) A diagnostic system for providing access to service diagnostics on an appliance, said diagnostic system comprising:

a plurality of appliances;

a ~~diagnostic interface~~ communication bus configured to be directly connected to said plurality of appliances, ~~said diagnostic interface comprising a display~~, wherein said ~~diagnostic interface~~ communication bus facilitates ~~accepting~~ transmitting, from a first appliance of said plurality of appliances to at least one appliance of said plurality of appliances, a request to perform a service diagnosis of the least one appliance of said plurality of appliances via service diagnostics commands ~~destined for at least one appliance of said plurality of appliances~~, the ~~service diagnostics commands~~ specific to said at least one appliance and obtained by said ~~diagnostic interface~~ from a device information table[.];

a microprocessor programmed to ~~permit a first level of authorized access to one of~~ perform a service diagnosis of the at least one appliance and to ~~permit a second level of~~ determine whether the first appliance has obtained control of the communication bus, and if the first appliance has obtained control of the communication bus, permit transmission of authorized access to at least one superuser-level function and to generate the service diagnostics commands; ~~said diagnostic interface configured to service said plurality of appliances by at least one of~~ adjusting a characteristic of at least one appliance and displaying to a technician the diagnostics commands; and

a dedicated appliance controller for receiving and executing the service diagnostics commands.

23-26. (canceled)

27. (currently amended) The system of claim 22 further comprising a remote system, the remote system connectable to the ~~diagnostic interface~~ plurality of appliances via an Internet connection.

28. (previously presented) The system of claim 22 wherein the dedicated appliance controller is contained within the at least one appliance.

29. (currently amended) The system of claim 22 ~~wherein the~~ further comprising a power line carrier modem ~~allows that enables~~ the diagnostic interface to communicate with at least one appliance via a power line carrier system.

30. (currently amended) The method of claim 1 wherein ~~said~~ adjusting the characteristic comprises changing, ~~by the diagnostic interface,~~ the characteristic of a home appliance via ~~[[the]]~~ a power line carrier.

31. (currently amended) The method of claim 1 further comprising translating, by ~~[[the]]~~ a power line carrier modem, between an appliance protocol of the at least one appliance and a power line carrier protocol.

32. (canceled)

33. (previously presented) The system of claim 22 wherein the dedicated appliance controller comprises a display and user input circuitry to facilitate providing user operation of the at least one appliance.

34. (new) The method of claim 22 wherein the communication bus is a serial communication bus.

35. (new) The method of claim 1, further comprising detecting a request of a second appliance of the plurality of appliances to perform a service diagnosis of one of the plurality of appliances.

36. (new) The method of claim 35, further comprising delaying a transmission of the request of one of the first appliance and the second appliance to enable transmission of the request of the other of the first appliance and the second appliance.